Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended):

A method, comprising:

switching data traffic having packets of data of a plurality of sizes between a first number of local area network (LAN) ports and a second number of wide area networks (WAN) links of a router resource; ~~and~~

assigning a portion of the second number of WAN links to one of the first number of LAN ports;

determining a bandwidth availability for the one of the first number of LAN ports from the bandwidth availability of the assigned portion of the second number of WAN links; and

throttling back the one of the first number of LAN ports to control ~~controlling~~ utilization of the router resource at an entry point to the router resource ~~interface between the first number of local area network (LAN) ports and the second number of wide area networks (WAN) links~~ according to the bandwidth availability ~~of corresponding bundles~~ of the assigned portion of the second number of WAN links ~~assigned to each of the LAN ports~~ and according to an assigned portion of an overall global ~~a~~ switching capacity of the router resource.

2. (original):

The method of claim 1 wherein individual ones of the LAN ports are permitted to exceed their fair share of the switching capacity of the router resource if a current switching load due to traffic from all of the LAN ports is less than a maximum switching capacity for the router resource.

3. (original):

The method of claim 1 wherein if a current switching load due to traffic from all of the LAN ports is equal to a maximum switching capacity of the router resource then those of the LAN ports that are attempting to utilize more than their fair share of the bandwidth availability or the switching capacity are throttled back.

4. (original):

The method of claim 3 wherein throttling back to LAN port comprises dropping packets inbound on that port at the packets' entry point to the router resource.

5. (previously presented):

A method, comprising:

switching data traffic having packets of data of a plurality of sizes between a first number of local area network (LAN) ports and a second number of wide area networks (WAN) links of a router resource;

assigning a portion of the second number of WAN links to one of the first number of LAN ports;

determining a bandwidth availability for the one of the first number of LAN ports from the bandwidth availability of the assigned portion of the second number of WAN links; and

determining, at an entry port ~~selected from one of a~~ for the one of the first number of ~~local area network (LAN)~~ LAN ports of a the router resource, whether or not to admit inbound traffic according to a fair allocation distribution scheme that allows traffic to be admitted according to the bandwidth availability for the one of the first number of LAN ports ~~of a corresponding exit port for the traffic selected from one of a second number of wide area networks (WAN) links of the router resource~~ and according to an assigned portion of total switching capacity of the router resource and a current utilization of total switching capacity of the router resource. ~~resource; and~~

~~switching admitted inbound traffic having packets of data of a plurality of sizes from the entry port to the exit port of the router resource.~~

6. (previously presented):

The method of claim 5 wherein the fair allocation scheme allows, traffic to be admitted so long as the bandwidth availability of the corresponding exit port exists.

7. (previously presented):

The method of claim 5 wherein the fair allocation scheme allows traffic to be admitted even if the exit port of the router resource associated with the traffic is exceeding an allocated amount of the total switching capacity of the router resource so long as the total switching capacity of the router resource has not been attained.

8. (previously presented):

The method of claim 7 wherein the fair allocation scheme allows traffic to be admitted so long as the bandwidth availability of the corresponding exit port exists.

9. (currently amended):

A routing resource comprising: ~~comprising~~

means for switching data traffic having packets of data of a plurality of sizes between a first number of local area network (LAN) ports and a second number of wide area networks (WAN) links of a router resource;

means for assigning a portion of the second number of WAN links to one of the first number of LAN ports;

means for determining a bandwidth availability for the one of the first number of LAN ports from the bandwidth availability of the assigned portion of the second number of WAN links; and

means for providing fair allocation of bandwidth availability and of switching capacity at an entry point to the router resource among the first number of LAN ports, ~~a number of input ports thereof,~~ the routing resource switching packets of data having a plurality of sizes, the fair allocation of bandwidth availability being provided according to output bandwidth capacity of ~~output~~ the assigned portion of the second number of WAN links ~~associated with the input~~ and the fair allocation of switching capacity being provided according to an assigned portion of a total switching capacity utilization of the routing resource.

10. (original):

The routing resource of claim 9 wherein the fair allocation is maintained by throttling back those input ports which attempt to exceed the output bandwidth capacity of their associated output links or which attempt to utilize more than their allocated share operating at the total switching capacity.

11. (original):

The routing resource of claim 10 wherein throttling back comprises dropping packets at an ingress point of the routing resource.

12. (currently amended):

A router comprising: ~~comprising~~

means for communicatively coupling a first number of local area network (LAN) ports with a second number of wide area network (WAN) links; ~~links,~~

means for ~~the router~~ switching packets of data having a plurality of sizes; ~~sizes,~~

means for assigning a portion of the second number of WAN links to one of the first number of LAN ports;

means for determining a bandwidth availability for the one of the first number of LAN ports from the bandwidth availability of the assigned portion of the second number of WAN links; and

means for controlling the utilization ~~by each~~ of bandwidth availability of the one of the first number of LAN ~~port~~ ports at an entry point to the router resource ~~being~~

~~controlled~~ according to the determined bandwidth availability for the one of the first number of ~~bundles of the WAN links assigned to each of the~~ LAN ports and according to an assigned portion of an overall global ~~a~~ switching capacity of the router resource. ~~router.~~

13. (previously presented):

The router of claim 12 wherein the router further comprises means for permitting individual ones of the LAN ports to exceed their fair share of the switching capacity of a current switching load due to traffic from all the LAN ports is less than a maximum switching capacity of the router.

14. (previously presented):

The router of claim 12 wherein the router further comprises means for throttling back those of the LAN ports exceeding their fair share of the switching capacity when a total switching load due to traffic from all of the LAN ports equal to a maximum switching capacity of the router.

15. (previously presented):

The router of claim 14 wherein throttling back a LAN port comprises dropping one or more packets inbound on that port at the packets' entry point to the router.

16. (currently amended):

Computer-readable medium having a sequence of instructions, the sequences of instructions, when executed by a processor, causing the processor to perform a method comprising:

switching data traffic having packets of data of a plurality of sizes between a first number of local area network (LAN) ports and a second number of wide area networks (WAN) links of a router resource;

assigning a portion of the second number of WAN links to one of the first number of LAN ports;

determining a bandwidth availability for the one of the first number of LAN ports from the bandwidth availability of the assigned portion of the second number of WAN links; and

determining, at an entry port ~~selected from one of a~~ for the one of the first number of ~~local area network (LAN)~~ LAN ports of ~~a~~ the router resource, whether or not to admit inbound traffic according to a fair allocation distribution scheme that allows traffic to be admitted according to the bandwidth availability for the one of the first number of LAN ports ~~of a corresponding exit port for the traffic selected from one of a second number of wide area networks (WAN) links of the router resource~~ and according to an assigned portion of total switching capacity of the router resource and a current utilization of total switching capacity of the router resource. ~~resource; and~~

~~switching admitted inbound traffic having packets of data of a plurality of sizes from the entry port to the exit port of the router resource.~~

17. (previously presented):

The computer-readable medium of claim 16 wherein the fair allocation scheme allows traffic to be admitted so long as the bandwidth availability of the corresponding exit port exists.

18. (previously presented):

The computer-readable medium of claim 16 wherein the fair allocation scheme allows traffic to be admitted even if the exit port of the router resource associated with that traffic is exceeding an allocated amount of the total switching capacity of the router resource so long as the total switching capacity of the router resource has not been attained.

19. (previously presented):

The computer-readable medium of claim 18 wherein the fair allocation scheme allows traffic to be admitted so long as the bandwidth availability of the corresponding exit port exists.

20. (previously presented):

The computer-readable medium of claim 16 wherein the fair allocation is maintained by throttling back those input ports which attempt to exceed the output bandwidth capacity of their associated output links or which attempt to utilize more than their allocated share operating at the total switching capacity.

21. (previously presented):

The computer-readable medium of claim 20 wherein throttling back comprises dropping packets at an ingress point of the routing resource.

22. (previously presented):

The computer-readable medium of claim 16, wherein the sequences of instructions is embodied on one of a floppy disk and a CD-ROM.

23. (previously presented):

The computer-readable medium of claim 16, wherein the sequences of instructions is embodied in electronic signals transported through a communication medium.